	FILE	'REGISTRY' ENTERED AT 10:35:37 ON 16 OCT 2008
L1		STRUCTURE UPLOADED
L2		0 S L1
L3		3 S L1 SSS FULL
	FILE	'HCAPLUS' ENTERED AT 10:36:13 ON 16 OCT 2008
L4		22 S L3
L5		11 S L4 AND (PY<2003 OR AY<2003 OR PRY<2003)
	FILE	'HCAPLUS' ENTERED AT 13:09:49 ON 16 OCT 2008
L1		77099 S (TNF(W)(ALPHA OR .ALPHA)) OR ((TUMOR NECROSIS FACTOR)(W)(ALPH
L2		77099 S (TNF(W)(ALPHA OR A)) OR ((TUMOR NECROSIS FACTOR)(W)(ALP
L3		173 S (REFLEX SYMPATHETIC SYSTROPHY) OR (COMPLEX REGIONAL PAIN SYND
L4		20 S L2 AND L3
L5		4 S L4 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file registry
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 10:35:37 ON 16 OCT 2008
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 15 OCT 2008 HIGHEST RN 1061881-29-5 DICTIONARY FILE UPDATES: 15 OCT 2008 HIGHEST RN 1061881-29-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

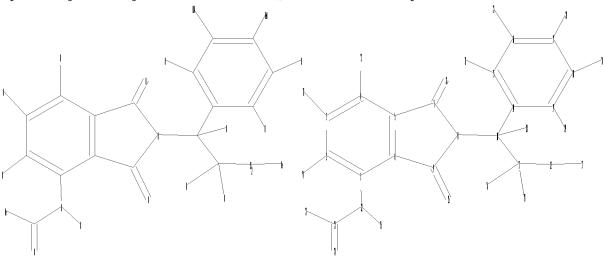
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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Uploading C:\Program Files\STNEXP\Queries\10693722specific.str



chain nodes :
10 11 12 13 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
37
ring nodes :
1 2 3 4 5 6 7 8 9 14 15 16 17 18 19
chain bonds :

1-22 2-34 3-33 4-32 7-26 8-10 9-25 10-11 10-14 10-28 11-12 11-36 11-37 12-13 15-31 16-21 17-20 18-30 19-29 22-23 22-35 23-24 23-27 ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 14-15 14-19 15-16 16-17 17-18 18-19

exact/norm bonds :

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exact bonds :

 $2-34 \quad 3-33 \quad 4-32 \quad 10-11 \quad 10-14 \quad 10-28 \quad 11-12 \quad 11-36 \quad 11-37 \quad 12-13 \quad 15-31 \quad 16-21$ 

17-20 18-30 19-29 22-35 23-27

normalized bonds :

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1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom

20:CLASS 21:CLASS

22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

30:CLASS 31:CLASS

32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS

## L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 10:35:59 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 5 TO 234 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 10:36:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 122 TO ITERATE

100.0% PROCESSED 122 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

L3 3 SEA SSS FUL L1

=> file hcaplus COST IN U.S. DOLLARS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
178.36
178.57

FILE 'HCAPLUS' ENTERED AT 10:36:13 ON 16 OCT 2008
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FILE COVERS 1907 - 16 Oct 2008 VOL 149 ISS 16 FILE LAST UPDATED: 15 Oct 2008 (20081015/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13 L4 22 L3

=> s 14 and (PY<2003 or AY<2003 or PRY<2003)

22959050 PY<2003 4498362 AY<2003 3966940 PRY<2003

=> d 15 1-11 ti abs bib

- L5 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- Solid forms of (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione, compositions thereof, and uses thereof
- AB Solid forms comprising (+)-2-[1-(3-Ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione (I), compns. comprising the solid forms, methods of making the solid forms and methods of their use are disclosed. The methods include methods of treating and/or preventing disorders ameliorated by the reduction of levels of TNF- $\alpha$  or the inhibition of PDE4. I was prepared by the reaction of 1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethylamine with 3-acetamidophthalic anhydride, yield = 59%.
- AN 2008:1156159 HCAPLUS <<LOGINID::20081016>>
- TI Solid forms of (+)-2-[1-(3-ethoxy-4-methoxypheny1)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione, compositions thereof, and uses thereof
- IN Muller, George W.; Schafer, Peter H.; Man, Hon-Wah; Ge, Chuansheng; Xu,
  Jean
- PA USA
- SO U.S. Pat. Appl. Publ., 66pp., Cont.-in-part of U.S. Ser. No. 106,142. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 4

	PAT	TENT NO.	KIND	DATE	API	PLICATION NO.	DATE
ΡI	US	20080234359	A1	20080925	US	2008-79615	20080327 <
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	US	6962940	В2	20051108			
	CN	1965823	A	20070523	CN	2006-10137407	20030320 <
	US	20050192336	A1	20050901	US	2005-106142	20050413 <
	US	7427638	B2	20080923			
	US	20050267196	A1	20051201	US	2005-170308	20050628 <
	US	7358272	B2	20080415			
	US	20080027123	A1	20080131	US	2007-824523	20070629 <
	US	20080207730	A1	20080828	US	2008-69282	20080208 <
	US	20080242719	A1	20081002	US	2008-98379	20080404 <
PRAI	US	2002-366515P	P	20020320	<		
	US	2003-438450P	P	20030107			
	US	2003-392195	A3	20030319			
	US	2005-106142	A2	20050413			
	CN	2003-811093	A3	20030320			
	US	2005-170308	A3	20050628			

- L5 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Compositions comprising selective cytokine inhibitory drugs for treatment and management of macular degeneration and Methods of using thereof
- AB Methods of treating, preventing and/or managing macular degeneration are disclosed. Specific embodiments encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. Thus, patients with macular degeneration received conventional therapy with verteporfin and (+)-2-[1-(3-ethoxy-4 methoxyphenyl)-2-methylsulfonylethyl]-4 acetylaminoisoindoline 1,3-dione in an amount of about 20 mg/day as an adjuvant for 20 wk. The neovascular cascade was sufficiently hindered in those patients to indefinitely prolong the effects of the photodynamic therapy.
- AN 2007:998162 HCAPLUS <<LOGINID::20081016>>
- DN 147:330440
- TI Compositions comprising selective cytokine inhibitory drugs for treatment and management of macular degeneration and Methods of using thereof
- IN Zeldis, Jerome B.
- PA USA
- SO U.S. Pat. Appl. Publ., 30pp., Cont.-in-part of U.S. Ser. No. 699,110. CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 2

	PATENT NO.				KIN	KIND DATE			APPLICATION NO.						DATE 				
PI		2007 2004				A1 A1			3 US 2003-699110							0061: 0031:		<	
	WO	2005	0442	69		A1		2005	0519	,	WO 2	004-	US13	253		2	0040	428	
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	KZ,	LC,	
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			•	•	•	•	R, TT, T		•	•	•	•	•	•	•	•	•		
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		2008						2008			AU ZI	008-	2014	18		2	0800	321	
PRAI						A2 20031030													
		2004																	
						P 20021031 A3 20031031													
OS	AU 2003-285107 A3			AS		2003	TOOT												
0.5	1.17-71	MARPAT 147:330440			40														

- L5 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods of the treatment or prevention of exercise-induced asthma using (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione
- AB Methods of treating, managing or preventing exercise-induced asthma are disclosed. Specific methods encompass the administration of (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione alone or in combination with a second active agent. Pharmaceutical compns. and single unit dosage forms are also disclosed.

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AN 2006:823362 HCAPLUS <<LOGINID::20081016>>
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DN 145:224862

- TI Methods of the treatment or prevention of exercise-induced asthma using (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione
- IN Muller, George W.; Schafer, Peter H.; Rohane, Patricia E. W.
- PA Celgene Corporation, USA
- SO U.S. Pat. Appl. Publ., 32pp., Cont.-in-part of U.S. Ser. No. 106,142. CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 4

r AN.		TENT NO.	KIND	DATE	API	PLICATION NO.	DATE
ΡI	US	20060183788	A1	20060817	US	2006-392846	20060328 <
	US	7276529	B2	20071002			
	US	20030187052	A1	20031002	US	2003-392195	20030319 <
	US	6962940	В2	20051108			
	CN	1965823	A	20070523	CN	2006-10137407	20030320 <
	US	20050192336	A1	20050901	US	2005-106142	20050413 <
	US	7427638	В2	20080923			
	US	20050267196	A1	20051201	US	2005-170308	20050628 <
	US	7358272	В2	20080415			
	US	20080027123	A1	20080131	US	2007-824523	20070629 <
	US	20080207730	A1	20080828	US	2008-69282	20080208 <
	US	20080242719	A1	20081002	US	2008-98379	20080404 <
PRAI	US	2002-366515P	P	20020320	<		
	US	2003-438450P	P	20030107			
	US	2003-392195	А3	20030319			
	US	2005-106142	A2	20050413			
	CN	2003-811093	A3	20030320			
	US	2005-170308	А3	20050628			
DE CI	ידידי	חסת שתשתום מחם	121 015	ren neernem	OEC AT	ATTADED DOD THE	DECODE

- RE.CNT 131 THERE ARE 131 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods of the treatment of psoriatic arthritis using (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione
- AB Methods of treating, managing or preventing psoriatic arthritis are disclosed. Specific methods encompass the administration of (+)-2-[1-(3-ethoxy-4-methoxypheny1)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione alone or in combination with a second active agent. Pharmaceutical compns. and single unit dosage forms are also disclosed.
- AN 2006:821184 HCAPLUS <<LOGINID::20081016>>
- DN 145:224861
- TI Methods of the treatment of psoriatic arthritis using (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione
- IN Muller, George W.; Schafer, Peter H.; Rohane, Patricia E. W.
- PA Celgene Corporation, USA
- SO U.S. Pat. Appl. Publ., 19pp., Cont.-in-part of U.S. Ser. No. 106,142. CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡΙ	US 20060183787 US 7208516	A1 B2	20060817 20070424	US 2006-392845	20060328 <

	US	20030187052	A1	20031002	US	2003-392195	20030319	<
	US	6962940	В2	20051108				
	CN	1965823	A	20070523	CN	2006-10137407	20030320	<
	US	20050192336	A1	20050901	US	2005-106142	20050413	<
	US	7427638	В2	20080923				
	US	20050267196	A1	20051201	US	2005-170308	20050628	<
	US	7358272	В2	20080415				
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PRAI	US	2002-366515P	P	20020320	<			
	US	2003-438450P	P	20030107				
	US	2003-392195	A3	20030319				
	US	2005-106142	A2	20050413				
	CN	2003-811093	A3	20030320				
	US	2005-170308	A3	20050628				

RE.CNT 130 THERE ARE 130 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of substituted phenethyl sulfones and methods of reducing  $\text{TNF}\alpha$  levels

GΙ

AB The title compds. I [Y = CO, CH2, SO2, CH2C(O); R1-R4 = H, halo, alkyl, alkoxy, etc.; R5, R6 = H, alkyl, alkoxy, CN, etc.; R7 = OH, alkyl, Ph, etc.], useful for reducing TNF $\alpha$  levels and treating inflammatory and autoimmune diseases, were prepared and formulated. E.g., a 2-step synthesis of 2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]isoindolin-1-one, starting from di-Me sulfone and 3-ethoxy-4-methoxybenzaldehyde, was given.

AN 2006:425851 HCAPLUS <<LOGINID::20081016>>

DN 147:189068

TI Preparation of substituted phenethyl sulfones and methods of reducing  ${\tt TNF}\alpha$  levels

IN Man, Hon-Wah; Muller, George W.

PA Celgene Corporation, USA

SO Aust. Pat. Appl., 53 pp. CODEN: AUXXCM

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	AU 2006200033	A1	20060202	AU 2006-200033	20060106
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	AU 2003203681	A1	20030703	AU 2003-203681	20030409 <

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AU 2003203681
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    AU 2000-14472
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                              19991019 <--
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OS
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- ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN L5
- Methods of using and compositions comprising selective cytokine inhibitory ΤI drugs for treatment and management of macular degeneration
- AΒ Methods of treating, preventing and/or managing macular degeneration are disclosed. Specific embodiments encompass the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. Patients with macular degeneration were treated by photodynamic therapy with verteporfin alone, or with the addition of 20 mg/day of selective cytokine inhibitory drug (+)-2-[1-(3-ethoxy-4  $\,$ methoxyphenyl)-2-methylsulfonylethyl]-4 acetylaminoisoindoline 1,3-dione. The neovascular cascade is sufficiently hindered in the group receiving (+)-2-[1-(3-ethoxy-4 methoxyphenyl)-2-methylsulfonylethyl]-4acetylaminoisoindoline 1,3-dione to indefinitely prolong the effects of the photodynamic therapy.
- 2004:392056 HCAPLUS <<LOGINID::20081016>> ΑN
- DN 140:386062
- Methods of using and compositions comprising selective cytokine inhibitory ΤI drugs for treatment and management of macular degeneration
- ΙN Zeldis, Jerome B.
- PAUSA
- SO U.S. Pat. Appl. Publ., 19 pp. CODEN: USXXCO
- DTPat.ent.

AU 2003 AU 2003 EP 156 R: BR 2003	)40091 )4263 )40411 )40411	454 81 81		A1 A2													
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L5 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN

Ι

TI Use of (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione and compositions thereof for inhibiting TNF- $\alpha$  production and PDE4 activity

GΙ

AB The invention discloses stereomerically pure  $(S)-2-[1-(3-\text{Ethoxy-}4-\text{methoxyphenyl})-2-\text{methylsulfonylethyl}]-4-\\ \text{acetylaminoisoindoline-}1,3-\text{dione}\ (+)-I, \text{ substantially free of its}\\ (-)-\text{isomer, and prodrugs, metabolites, polymorphs, salts, solvates,}\\ \text{hydrates, and clathrates thereof. Methods of using and pharmaceutical}\\ \text{compns. comprising}\ (+)-I \text{ for treating and/or preventing disorders}\\ \text{ameliorated by the reduction of levels of tumor necrosis factor}\ \alpha\\ (\text{TNF-}\alpha) \text{ or the inhibition of phosphodiesterase IV (PDE4)} \text{ are also}\\ \text{disclosed. Examples include the synthesis and resolution of (+)-I, thirteen}$ 

bioassays, an aqueous solubility study, and three formulations. For instance, 3-nitrophthalic acid was hydrogenated using 10% Pd/C in EtOH to give the amine (84%), which was condensed with Ac20 to afford 3-acetamidophthalic anhydride (61%). Reaction of the phthalic anhydride with  $1-(3-\text{ethoxy-4-methoxyphenyl})-2-(\text{methylsulfonyl})\,\text{ethylamine}$  to give I (59%), followed by resolution with N-acetyl-L-leucine in MeOH provided (+)-I (90% recovery, 98.4% ee). The latter inhibited LPS-induced TNF- $\alpha$  production by human whole blood and PDE4 activity with IC50 values of 294 nM and 73.5 nM, resp. (+)-I showed >500-fold to >40,000-fold selectivity for PDE4 over PDE1, PDE2, PDE3, PDE5, and PDE6. In addition, (+)-I suppressed LPS-induced lung neutrophilia in conscious ferrets with an ED50 of 0.8 mg/kg. Thus, (+)-I and its pharmaceutical compns. are useful for treating and/or preventing cancer, depression, and a variety of allergic, inflammatory, and autoimmune disorders (no data).

AN 2003:777583 HCAPLUS <<LOGINID::20081016>>

DN 139:296870

- TI Use of (+)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione and compositions thereof for inhibiting TNF- $\alpha$  production and PDE4 activity
- IN Schafer, Peter H.; Muller, George W.; Man, Hon-Wah; Ge, Chuansheng
- PA Celgene Corporation, USA
- SO PCT Int. Appl., 57 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 4

	PA:									APPLICATION NO.						DATE			
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
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RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Use of (-)-2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4- acetylaminoisoindoline-1,3-dione and compositions thereof for inhibiting TNF- $\alpha$  production and PDE4 activity

GΙ

AΒ The invention discloses stereomerically pure (R) - 2 - [1 - (3 - Ethoxy - 4 - methoxyphenyl) - 2 - methylsulfonylethyl] - 4 acetylaminoisoindoline-1,3-dione (-)-I, substantially free of its (+)-isomer, and prodrugs, metabolites, polymorphs, salts, solvates, hydrates, and clathrates thereof. Methods of using and pharmaceutical compns. comprising (-)-I for treating and/or preventing disorders ameliorated by the reduction of levels of tumor necrosis factor  $\boldsymbol{\alpha}$  $({\tt TNF-}\alpha)$  or the inhibition of phosphodiesterase IV (PDE4) are also disclosed. Examples include the synthesis and resolution of (-)-I, seven bioassays, an aqueous solubility study, and three formulations. For instance, 3-nitrophthalic acid was hydrogenated using 10% Pd/C in EtOH to give the amine (84%), which was condensed with Ac2O to afford 3-acetamidophthalic anhydride (61%). Reaction of the phthalic anhydride with 1-(3-ethoxy-4-methoxyphenyl)-2-(methylsulfonyl) ethylamine to give I (59%),followed by resolution with N-acetyl-D-leucine in MeOH provided (-)-I (90% recovery, 98.4% ee). The latter inhibited LPS-induced TNF- $\alpha$  production by human whole blood and PDE4 activity with IC50 values of 371 nM and 611 nM, resp. (-)-I showed >45-fold to >39,000-fold selectivity for PDE4 over PDE1, PDE2, PDE3, PDE5, and PDE6. Thus, (-)-I and its pharmaceutical compns. are useful for treating and/or preventing cancer, depression, and a variety of allergic, inflammatory, and autoimmune disorders (no data).

AN 2003:777582 HCAPLUS <<LOGINID::20081016>>

DN 139:296869

TI Use of (-)-2-[1-(3-ethoxy-4-methoxypheny1)-2-methylsulfonylethyl]-4-acetylaminoisoindoline-1,3-dione and compositions thereof for inhibiting TNF- $\alpha$  production and PDE4 activity

IN Schafer, Peter H.; Muller, George W.; Man, Hon-Wah; Ge, Chuansheng

PA Celgene Corporation, USA

SO PCT Int. Appl., 49 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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                       A1 20031002 WO 2003-US8737
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    WO 2003080048
                                                                 20030320 <--
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PRAI US 2002-366516P
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    20030107
                              20030320
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 3
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN
L5
ΤI
    Interactions between myeloma and endothelial cells and the effects of
    thalidomide and its analogues
AΒ
    Modeling the situation observed in vivo, the authors examined the effects of
    thalidomide and its analogs in co-cultures of myeloma and endothelial
    cells. It was found that myeloma cells in co-culture had significantly
    lower levels of CC-10004- and CC-1088-induced apoptosis than those
    cultured alone. Interestingly, basal apoptosis was also lower in
    RPMI-8226/S co-cultured with endothelial cells compared to myeloma cell
    culture. The authors' data suggest that myeloma/endothelial cell
    interactions in co-culture have a significant protective effect on both
    basal and drug-induced levels of apoptosis in myeloma cells.
    2003:649755 HCAPLUS <<LOGINID::20081016>>
AN
    140:228565
DN
ΤI
    Interactions between myeloma and endothelial cells and the effects of
    thalidomide and its analogues
ΑU
    Molostvov, G.; Morris, A.; Rose, P.; Basu, S.
CS
    University of Warwick, Coventry, UK
SO
    Free Papers - Annual Meeting of the European Haematology Association, 7th,
    Florence, Italy, June 6-9, 2002 (2002), 263-266 Publisher:
    Monduzzi Editore, Bologna, Italy.
    CODEN: 69EIOR; ISBN: 88-323-2606-X
DT
    Conference
LA
    English
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THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

L5 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of substituted phenethylsulfones for reducing  $\text{TNF}\alpha$  levels

ALL CITATIONS AVAILABLE IN THE RE FORMAT

RE.CNT 3

$$R^{1}$$
 $R^{2}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{7}$ 

AB The title compds. [I; the carbon atom designated "\*" constitutes a center of chirality; Y = CO, CH2< CH2CO; R1-R4 = H, halo, alkyl, etc.; R5, R6 = H, alkyl, alkoxy, etc.; R7 = OH, alkyl, Ph, etc.] which reduce the levels of  $TNF\alpha$  and inhibit PDE IV in a mammal (no data), were prepared and formulated. Typical embodiments are 2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-aminoisoindoline-1,3-dione and <math>2-[1-(3-cyclopentyloxy-4-methoxyphenyl)-2-methylsulfonylethyl]isoindoline-1,3-dione.

AN 2000:78904 HCAPLUS <<LOGINID::20081016>>

DN 132:107873

TI Preparation of substituted phenethylsulfones for reducing  $\mbox{TNF}\alpha$  levels

Ι

IN Muller, George W.; Man, Hon-wah

PA Celgene Corporation, USA

SO U.S., 13 pp. CODEN: USXXAM

DT Patent

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EP 1999-971317 A3 19991019 <-WO 1999-US24376 W 19991019 <--

OS MARPAT 132:107873

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2008 ACS on STN

Ι

TI Preparation of substituted phenethylsulfones and method of reducing  $\mathtt{TNF}\alpha$  levels

GΙ

$$R^{1}$$
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{5}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{7}$ 
 $R^{7}$ 
 $R^{8}$ 

AB The title compds. [I; the carbon atom designated \* constitutes a center of chirality; Y = SO2, CO, CH2; R1-R4 = H, halo, alkyl, etc.; R5, R6 = H, alkyl, alkoxy, etc.; R7 = OH, alkyl, Ph, etc.], useful in reducing the levels of TNF $\alpha$  and inhibiting PDE IV (no data), were prepared and formulated. Typical embodiments are 2-[1-(3-ethoxy-4-methoxyphenyl)-2-methylsulfonylethyl]-4-aminoisoindoline-1, 3-dione and 2-[1-(3-cyclopentyloxy-4-methoxyphenyl)-2-methylsulfonylethyl] isoindoline-1, 3-dione (prepns. were given).

AN 2000:10631 HCAPLUS <<LOGINID::20081016>>

DN 132:64167

TI Preparation of substituted phenethylsulfones and method of reducing  $\mathtt{TNF}\alpha$  levels

IN Muller, George W.; Man, Hon-Wah

PA Celgene Corporation, USA

SO U.S., 12 pp., Division of U.S. Ser. No. 183,049. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

T T TTA .	CIVI				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 6011050	A	20000104	US 1999-340617	19990629 <
	US 6020358	A	20000201	US 1998-183049	19981030 <
PRAI	US 1998-183049	A3	19981030	<	
OS	MARPAT 132:64167				

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

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FILE COVERS 1907 - 16 Oct 2008 VOL 149 ISS 16 FILE LAST UPDATED: 15 Oct 2008 (20081015/ED)
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HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

nested terms that are not separated by a logical operator.

=> s (TNF(alpha or .alpha)) or ((tumor necrosis factor)(w)(alpha or  $\alpha$ )) MISSING OPERATOR 'TNF(ALPHA' The search profile that was entered contains terms or

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       1800010 .ALPHA
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         60832 TNF(W)(ALPHA OR .ALPHA)
        470274 TUMOR
        146202 NECROSIS
       1160676 FACTOR
         78189 TUMOR NECROSIS FACTOR
                  (TUMOR (W) NECROSIS (W) FACTOR)
       1800010 ALPHA
       1800010 A
                  (ALPHA)
         47757 (TUMOR NECROSIS FACTOR)(W)(ALPHA OR A)
T.1
         77099 (TNF(W)(ALPHA OR .ALPHA)) OR ((TUMOR NECROSIS FACTOR)(W)(ALPHA
                OR A))
=> s (TNF(w)(alpha or \alpha)) or ((tumor necrosis factor)(w)(alpha or \alpha))
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1800010 A

(ALPHA) 47757 (TUMOR NECROSIS FACTOR) (W) (ALPHA OR A) 77099 (TNF(W)(ALPHA OR A)) OR ((TUMOR NECROSIS FACTOR)(W)(ALPHA L2 OR A)) => s (reflex sympathetic systrophy) or (complex regional pain syndrome) 26744 REFLEX 41727 SYMPATHETIC 2 SYSTROPHY O REFLEX SYMPATHETIC SYSTROPHY (REFLEX(W)SYMPATHETIC(W)SYSTROPHY) 1440681 COMPLEX 74307 REGIONAL 63422 PAIN 149117 SYNDROME 173 COMPLEX REGIONAL PAIN SYNDROME (COMPLEX (W) REGIONAL (W) PAIN (W) SYNDROME) L3 173 (REFLEX SYMPATHETIC SYSTROPHY) OR (COMPLEX REGIONAL PAIN SYNDROM E) => s 12 and 13 20 L2 AND L3 => s 14 and (PY<2003 or AY<2003 or PRY<2003) 22959050 PY<2003 4498362 AY<2003 3966940 PRY<2003 L54 L4 AND (PY<2003 OR AY<2003 OR PRY<2003) => d 15 1-4 ti abs bib ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN L5 ΤI Methods of using and compositions comprising selective cytokine inhibitory drug for treatment, modification and management of pain AΒ Methods of treating, preventing, modifying and managing various types of pain are disclosed. Specific methods comprise the administration of a selective cytokine inhibitory drug, or a pharmaceutically acceptable salt, solvate, hydrate, stereoisomer, clathrate, or prodrug thereof, alone or in combination with a second active agent and/or surgery, psychol. or phys. therapy. Pharmaceutical compns., single unit dosage forms, and kits suitable for use in methods of the invention are also disclosed. ΑN 2005:426388 HCAPLUS <<LOGINID::20081016>> DN TΙ Methods of using and compositions comprising selective cytokine inhibitory drug for treatment, modification and management of pain Zeldis, Jerome B.; Faleck, Herbert; Manning, Donald C. ΙN PΑ Celgene Corporation, USA PCT Int. Appl., 85 pp. SO CODEN: PIXXD2 DTPat.ent. LA English FAN CNT 6

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	PAT	CENT :	NO.			KIN	D	DATE		1	APPL	ICAT	ION I	NO.		D	ATE	
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	WO					A3 20050714												
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OS
     MARPAT 142:457121
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L5 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of 2-(fluoroalkoxyphenylalkyl)-1,3-dihydroisoindolones as PDE4, TNF- $\alpha$  , and/or MMP inhibitors

GΙ

$$X^4$$
 $X^4$ 
 $X^3$ 
 $X^4$ 
 $X^4$ 
 $X^5$ 
 $X^7$ 
 $X^7$ 

Title compds. I [wherein X1-X4 = independently H, halo, NO2, NH2, CF3, alkyl, cycloalkyl(alkyl), NR7R8-(alkyl), R8CONH-(alkyl), NR7R8CONH-(alkyl), R8OCONH-(alkyl), imidazolyl(alkyl), pyrrolyl(alkyl), oxadiazolyl(alkyl), triazolyl(alkyl); or X1 and X2 or X2 and X3 or X3 and X4 may be taken together to form a (hetero)cycloalkyl ring; Y = CO, CH2, CH2CO, COCH2, SO2; Z = H, COR3, alkylsulfonyl(alkyl),

alkyl, CH2OH, alkoxymethyl, CN; R1 and R2 = independently CHF2, alkyl, cycloalkyl(alkyl); at least one of R1 and R2 = CHF2; R3 = NR4R5, alkyl, OH, alkoxy, (un)substituted Ph, PhCH2; R4 and R5 = independently H, alkyl, OH, OCOR6; R6 = alkyl(amino), Ph, PhCH2, aryl; R7 and R8 = independently H, alkyl, cycloalkyl(alkyl), NR7R8-alkyl, R80-alkyl, Ph, PhCH2, aryl; or pharmaceutically acceptable salts, hydrates, solvates, clathrates, stereoisomers, and prodrugs thereof] were prepared For example, alkylation of 3,4-dihydroxybenzaldehyde with chlorodifluoromethane in the presence of K2CO3 in DMF gave 4-difluoromethoxy-3-hydroxybenzaldehyde (15%), which was further alkylated with bromomethylcyclopropane under the same conditions to afford 3-cyclopropylmethoxy-4-difluoromethoxybenzaldehyde (100%). Reaction of the benzaldehyde with ammonium acetate in 95% EtOH, followed by addition of malonic acid provided 3-amino-3-(3-cyclopropylmethoxy-4difluoromethoxyphenyl)propionic acid (52%). Condensation of the amine with 3-acetamidophthalic anhydride using sodium acetate in AcOH yielded the isoindoledione II (85%). I and their pharmaceutical compns., optionally in combination with another therapeutic agent, are useful for the treatment or prevention of diseases associated with phosphodiesterase 4 (PDE4) inhibition, abnormal tumor necrosis factor  $\alpha$  (TNF- $\!\alpha$  ) levels , and/or matrix metalloproteinase (MMP) inhibition, such as myelodysplastic syndrome, myeloproliferative disease, complex regional pain syndrome, cancer, inflammatory diseases, and autoimmune diseases (no data). 2004:589381 HCAPLUS <<LOGINID::20081016>> 141:140314 Preparation of 2-(fluoroalkoxyphenylalkyl)-1,3-dihydroisoindolones as PDE4, TNF- $\alpha$  , and/or MMP inhibitors Muller, George W.; Man, Hon-Wah; Zhang, Weihong Celgene Corporation, USA PCT Int. Appl., 98 pp. CODEN: PIXXD2 Patent English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_ \_\_\_\_\_ A2 WO 2004060313 20040722 WO 2003-US41568 20031229 <--WO 2004060313 А3 20050915 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2511843 20040722 CA 2003-2511843 Α1 20031229 <--AU 2003303511 Α1 20040729 AU 2003-303511 20031229 <--US 2003-748085 US 20040204448 Α1 20041014 20031229 <--US 7173058 В2 20070206

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    ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
L5
    Evidence for local inflammation in complex regional
ΤI
    pain syndrome type 1
AΒ
     BACKGROUND: The pathophysiol. of complex regional
    pain syndrome type 1 (CRPS 1) is still a matter of
     debate. Peripheral afferent, efferent and central mechanisms are
     supposed. Based on clin. signs and symptoms (e.g. edema, local temperature
     changes and chronic pain) local inflammation is suspected. Aim: To determine
     the involvement of neuropetides, cytokines and eicosanoids as locally
     formed mediators of inflammation. Methods: In this study, nine patients
     with proven CRPS 1 were included. Disease activity and impairment was
     determined by means of a Visual Analog Scale, the McGill Pain Questionnaire,
     the difference in volume and temperature between involved and uninvolved
     extremities, and the reduction in active range of motion of the involved
     extremity. Venous blood was sampled from and suction blisters made on the
     involved and uninvolved extremities for measurement of cytokines
     interleukin (IL)-6, IL-1\beta and tumor necrosis
     factor-\alpha (TNF-\alpha), the
     neuropetides NPY and CRGP, and prostaglandin E2. Results: The patients
     included in this study did have a moderate to serious disease activity and
     impairment. In plasma, no changes of mediators of inflammation were observed
     In blister fluid, however, significantly higher levels of IL-6 and
     {\tt TNF-}\alpha in the involved extremity were observed in
     comparison with the uninvolved extremity. Conclusions: This is the first
     time that involvement of mediators of inflammation in CRPS 1 has been so
     clearly and directly demonstrated. This observation opens new approaches
     for the successful use and development of immunosuppressives in CRPS 1.
     ΑN
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    137:167971
ΤI
    Evidence for local inflammation in complex regional
    pain syndrome type 1
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     Groeneweg, J. George; Klein, Jan; Zijlstra, Freek J.
CS
    Pain Treatment Centre, Erasmus Medical Centre, Rotterdam, 3000 CA, Neth.
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             THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
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    ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN
L5
     Increased production of nitric oxide stimulated by interferon-\gamma from
TΙ
     peripheral blood monocytes in patients with complex
     regional pain syndrome
AΒ
     This study examines immediate nitric oxide (NO) release from monocytes
     following interleukin-1\beta (IL-1\beta), interferon-\gamma
     (IFN-\gamma), and tumor necrosis factor-.
     alpha. (TNF-\alpha ) challenge in patients
     with complex regional pain syndrome
     (CRPS). Study patients exhibited the following: (1), mech. allodynia;
     (2), evidence of either vasomotor or sudomotor disturbance; and (3),
     concordant painful allodynia documented with quant. sensory testing that
     was temporarily abolished with sympathetic block. Ten subjects (CRPS,
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N=5; control, N=5) were enrolled. Peripheral blood monocytes were challenged with 100  $\mu L$  of IL-1 $\beta$  (1 ng), IFN- $\gamma$  (1 ng), TNF- $\alpha$  (0.01 ng), and normal saline (NS) and the resultant immediate NO release measured. Subjects with CRPS exhibited a statistically significant increase in NO release in response to IFN- $\gamma$  compared with controls. The NO responses to IFN- $\gamma$  in excess of NS and as the ratio IFN- $\gamma$ /NS were also significantly increased.

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- TI Increased production of nitric oxide stimulated by interferon-  $\!\gamma\!$  from peripheral blood monocytes in patients with complex regional pain syndrome
- AU Hartrick, Craig T.
- CS Department of Anesthesiology and Perioperative Medicine, William Beaumont Hospital, Royal Oak, MI, 48073, USA
- SO Neuroscience Letters (2002), 323(1), 75-77 CODEN: NELED5; ISSN: 0304-3940
- PB Elsevier Science Ireland Ltd.
- DT Journal
- LA English
- RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT